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EXAMINER	
WON, MICHAEL YOUNG	
ART UNIT	**PAPER NUMBER**
2155	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/662,038	STRASSNER, JOHN	
	Examiner	Art Unit	
	MICHAEL Y. WON	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 May 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed May 29, 2008.

2. Claims 2 and 20 have been amended and claim 24 has been cancelled.

3. Claims 1-23 have been examined and are pending with this action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 20-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Weisser, Jr. (US 6,973,494).

As per **claim 20**, Weisser, Jr. teaches a method for obtaining information from different devices in a network comprising:

receiving data representing the information from each of the different devices, where the data is in a specific form relating to each of the different devices (see col.39-42: "The mapping module 106 may receive NE data 102 and customer information data 104"); and

assigning the data from each of the different devices to one or more entities as defined by an information model (see col.5, lines 34-39: "assigns a customer identifier to each NE"); and

grouping the data from each of the different devices using an adaptation layer before assigning the data from that device to one or more entities (see col.2, lines 36-42: "comprises a plurality of sub-tree layers…").

As per **claim 21**, which depends on claim 20, Weisser, Jr. further teaches wherein assigning the data further comprises: preserving a semantic of the received data; comparing received data against one or more managed entities; and transforming the data into a common representation (see col.2, line 65-col.3, line 2 and col.4, lines 42-45).

As per **claim 22**, which depends on claim 21, Weisser, Jr. teaches further comprising using the common representation of the data to monitor the performance of the network (see col.2, lines 53-56).

As per **claim 23**, which depends on claim 21, Weisser, Jr. further teaches wherein transforming the data into a common representation is performed by a mediation layer (see col.4, lines 42-45).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weisser, Jr. (US 6,973,494) in view of Evans et al. (US 7,213,026).

INDEPENDENT:

As per **claim 1**, Weisser, Jr. teaches a system for managing a network comprising:

a processor configured to manage at least one network element associated with the network (see col.9, lines 23-38: "executed by a processor");

a memory device coupled to the processor and configured to store an application program (see col.9, lines 23-38: "computer-readable medium having stored thereon instructions, when executed by a processor"); and

one or more repositories configured to communicate with the network, where at least one repository is configured to maintain an object-oriented information model (see col.3, lines 57-58: "structure of objects stored in a network element database"),

wherein the at least one managed entity data structure is used to map different characteristics of different network elements into one or more vendor-independent data models (see col.2, line 65-col.3, line 2: "to provide the desired bidirectional mapping for all products in the managed network, regardless of the equipment vendor, thereby providing a vendor independent solution to the customer-to-network mapping issue").

Weisser, Jr. does not explicitly teach the information model including at least one managed entity data structure for describing the network element as a physical entity represented by one or more physical objects.

Evans teaches the information model including at least one managed entity data structure for describing the network element as a physical entity represented by one or more physical objects (see col.2, lines 26-39: "generates a plurality of tables, wherein at least one table includes instance entries for instances of physical object classes representing physical entities").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Weisser, Jr. in view of Evans by implementing the information model including at least one managed entity data structure for describing the network element as a physical entity represented by one or more physical objects. One would be motivated to do so because Evans teaches that there is a need to address the provisions of a management structure that can accommodate logical and physical managed entities, wherein the logical entities may be realized by physical entries" (see Evans: col.2, lines 15-19).

As per **claim 11**, Weisser, Jr. teaches a method for managing a network comprising:

forming a first representation of a network element, the first representation having a form independent of an implementation defined by a vendor (see col.2, line 65-col.3, line 2: "to provide the desired bidirectional mapping for all products in the managed network, regardless of the equipment vendor, thereby providing a vendor independent solution to the customer-to-network mapping issue"); and

mapping a portion of the first representation from the information model to a second representation in a vendor-independent data model residing in a first repository (see col.3, lines 57-58: “structure of objects stored in a network element database”), the second representation having a form suitable for use with the first repository (see col.2, line 65-col.3, line 2: "to provide the desired bidirectional mapping for all products in the managed network, regardless of the equipment vendor, thereby providing a vendor independent solution to the customer-to-network mapping issue").

Weisser, Jr. does not explicitly teach a physical entity in an information model.

Evans teaches a physical entity in an information model (see col.2, lines 26-39: “generates a plurality of tables, wherein at least one table includes instance entries for instances of physical object classes representing physical entities”).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Weisser, Jr. in view of Evans by implementing a physical entity in an information model. One would be motivated to do so because Evans teaches that there is a need to address the provisions of a management structure that can accommodate logical and physical managed entities, wherein the logical entities may be realized by physical entries” (see Evans: col.2, lines 15-19).

DEPENDENT:

As per **claim 2**, which depends on claim 1, Weisser, Jr. does not explicitly teach wherein the at least one managed entity data structure further describes the network element a logical entity represented by one or more logical objects.

Evans teaches at least one managed entity data structure further describes the network element a logical entity represented by one or more logical objects (see col.2, lines 33-36: "Attributes of logical object classes representing logical entities are mapped to the tables").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Weisser, Jr. in view of Evans so that at least one managed entity data structure further describes the network element a logical entity represented by one or more logical objects. One would be motivated to do so because Evans teaches that there is a need to address the provisions of a management structure that can accommodate logical and physical managed entities, wherein the logical entities may be realized by physical entries" (see Evans: col.2, lines 15-19).

As per **claim 3**, which depends on claim 1, Weisser, Jr. does not explicitly teach wherein the at least one managed entity data structure further describes a logical characteristic for the network element as one or more logical characteristic classes.

Evans teaches at least one managed entity data structure further describes a logical characteristic for the network element as one or more logical characteristic classes (see col.2, lines 42-46).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Weisser, Jr. in view of Evans so that at

least one managed entity data structure further describes a logical characteristic for the network element as one or more logical characteristic classes. One would be motivated to do so because Evans teaches that there is a need to address the provisions of a management structure that can accommodate logical and physical managed entities, wherein the logical entities may be realized by physical entries" (see Evans: col.2, lines 15-19).

As per **claim 4**, which depends on claim 1, Weisser, Jr. further teaches wherein the at least one managed entity data structure further describes a composition of the network element as one or more composition classes (see col.3, line 67-col.4, line 2).

As per **claim 5**, which depends on claim 1, although Weisser, Jr. further teaches wherein the at least one managed entity data structure further describes mappings with at least one other different network element (see col.5, lines 65-col.6, line 2), Weisser, Jr. does not explicitly teach that the mapping of equivalent physical capabilities of other different network element.

Evans teaches mapping of equivalent physical capabilities of other different network element (see col.17, lines 54-60).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Weisser, Jr. in view of Evans by implementing mapping of equivalent physical capabilities of other different network element. One would be motivated to do so because the elements being mapped is subjective and because Weisser, Jr. teaches the mapping module may implement other

assignment policies (see col.5, lines 46-17) and may include additional mapping process (see col.6, lines 3-4).

As per **claim 6**, which depends on claim 1, Weisser, Jr. and Evans further teaches wherein the at least one managed entity data structure further describes equivalent logical capabilities with an implementation of at least one other different network element as one or more equivalent logical capabilities mappings (see claim 5 and claim 2 rejections above).

As per **claim 7**, which depends on claim 1, Weisser, Jr. does not explicitly teach wherein the at least one managed entity data structure further describes a link between a logical capability and hardware for performing the logical capability as one or more hardware linkage mappings.

Evans teaches at least one managed entity data structure further describes a link between a logical capability and hardware for performing the logical capability as one or more hardware linkage mappings (see col.2, lines 26-36).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Weisser, Jr. in view of Evans so that at least one managed entity data structure further describes a link between a logical capability and hardware for performing the logical capability as one or more hardware linkage mappings. One would be motivated to do so because the elements being mapped is subjective and because Weisser, Jr. teaches the mapping module may implement other assignment policies (see col.5, lines 46-17) and may include additional mapping process (see col.6, lines 3-4).

As per **claim 8**, which depends on claim 1, Weisser, Jr. further teaches wherein the at least one managed entity data structure further describes at least one link between different logical features and vendor- specific commands as one or more vendor-specific mappings (see col.2, line 65-col.3, line 2).

As per **claim 9**, which depends on claim 1, Weisser, Jr. further teaches wherein the application program is configured to solicit information from at least two different network elements (see Fig.2).

As per **claim 10**, which depends on claim 1, although Weisser, Jr. further teaches wherein one of the at least two different network elements is associated with a command line interface programming model (see Fig.4 and col.11-13), Weisser, Jr. does not explicitly teach and another of the at least two different network elements is associated with a simple network management protocol programming model.

Evan teaches another of the at least two different network elements is associated with a simple network management protocol programming model (see col.21, lines 29-31).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Weisser, Jr. in view of Evans so that another of the at least two different network elements is associated with a simple network management protocol programming model. One would be motivated to do so because Weisser, Jr. teaches that external nodes may access the system via a network management system (see col.5, line 4-10) wherein SNMP a common protocol known in the art for managing networks.

As per **claim 12**, which depends on claim 11, Weisser, Jr. further teaches wherein the first representation, further represents the network element as a logical entity (see claim 2 rejection above).

As per **claim 13**, which depends on claim 11, Weisser, Jr. further teaches wherein forming the first representation in the information model further comprises: abstracting a characteristic from one or more different network elements; and mapping the abstracted characteristic to the information model (see col.2, lines 36-42).

As per **claim 14**, which depends on claim 13, Weisser, Jr. further teaches wherein the characteristic relates to a programming model of the one or more different network elements (see col.4, lines 33-47 and col.6, lines 3-4).

As per **claim 15**, which depends on claim 11, Weisser, Jr. teaches further comprising mapping the second representation into a third representation in a vendor-dependent data model, wherein the third representation is optimized for implementing the network element (see col.2, line 65-col.3, line 2).

As per **claim 16**, which depends on claim 15, Weisser, Jr. further teaches wherein the third representation is in a form for implementing the network element as a specific device as defined by the vendor (see col.2, line 65-col.3, line 2).

As per **claim 17**, which depends on claim 11, Weisser, Jr. further teaches wherein the first repository is a relational database (see col.4, lines 46-47).

As per **claim 18**, which depends on claim 11, Weisser, Jr. teaches further comprising mapping another portion of the first representation from the information

model to another vendor-independent data model residing in a second repository (see Fig.2).

As per **claim 19**, which depends on claim 18, Weisser, Jr. further teaches wherein the second repository is a directory (see col.4, lines 48-59).

Response to Arguments

5. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. For the reason above claim 1-23 have been rejected and remain pending.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL Y. WON whose telephone number is (571)272-3993. The examiner can normally be reached on M-Th: 10AM-8PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Won/

Primary Examiner

July 22, 2008